

In re Patent Application of
GORSUCH ET AL.
Serial No. **Not Yet Assigned**
Filed: **Herewith**

In the Specification:

Please replace the paragraph beginning at page 1, line 2, with the following rewritten paragraph:

This application is a Continuation of pending U.S. Application No. 10/345,791 filed January 16, 2003 entitled "Dynamic Bandwidth Allocation to Transmit a Wireless Protocol Across a Code Division Multiple Access (CDMA) Radio Link, which is a Continuation of U.S. Application No. 09/596,425 filed June 19, 2000, now U.S. Patent No. 6,526,281 entitled "Dynamic Bandwidth Allocation to Transmit a Wireless Protocol Across a Code Division Multiple Access (CDMA) Radio Link," which in turn is a Continuation of U.S. Application No. 08/992,760 filed December 17, 1997, now U.S. Patent No. 6,081,536 entitled "Dynamic Bandwidth Allocation to Transmit a Wireless Protocol Across a Code Division Multiple Access (CDMA) Radio Link," which itself claims the benefit of U.S. Provisional Application No. 60/050,338 filed June 20, 1997 entitled "Dynamic Bandwidth Allocation to Transmit a Wireless Protocol Across a Code Division Multiple Access (CDMA) Radio Link," and U.S. Provisional Application No. 60/050,277 filed June 20, 1997 entitled "Protocol Conversion and Bandwidth Reduction Technique Providing Multiple nB+D ISDN Basic Rate Interface Links Over a Wireless Code Division Multiple Access Communication System," the entire teachings of all of which are incorporated herein by reference.

Please delete the Summary of the Invention section beginning on page 4, line 6 in its entirety and add the following Summary of the Invention section:

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SUMMARY OF THE INVENTION

In view of the foregoing background, an object of the present invention is to provide high speed data and voice service over standard wireless connections via a unique integration of ISDN protocols and existing cellular signaling such as is available with Code Division Multiple Access (CDMA) type digital cellular systems.

This and other objects, advantages and features in accordance with the present invention are provided by a CDMA user device comprising a CDMA transceiver, a controller connected to the CDMA transceiver, and communication session establishment software for establishing a communication session with a base station. The communication session comprises a plurality of layers including a physical layer.

The CDMA user device further comprises bandwidth negotiation software for negotiating with the base station an allocated bandwidth for the CDMA transceiver, physical layer connection software for establishing and releasing a physical layer connection between the CDMA transceiver and the base station, and state maintenance software for maintaining a state of at least one other layer during the communication session after termination of the physical layer.

The bandwidth negotiation software may comprise a routine for facilitating an assignment of at least one radio link to the CDMA transceiver in a CDMA channel. The at least one radio link may comprise a plurality of radio links having different bandwidths. The bandwidth negotiation software may comprise a routine for facilitating an assignment of at least one CDMA subchannel in a CDMA channel. The at least one CDMA

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subchannel may comprises a plurality of CDMA subchannels having different bandwidths.

The state maintenance software may be operable upon termination of the physical layer. The bandwidth negotiation software may comprise a routine that communicates a requested bandwidth to the base station. The CDMA transceiver may simultaneously transmit control, voice and data information. The CDMA transceiver may also simultaneously transmit control and data information on separate CDMA subchannels.

The CDMA user device may further comprise a channel multiplexer for multiplexing user information over a plurality of CDMA subchannels. The user information may comprise voice and data. In addition, a personal digital assistant (PDA) may be connected to the controller.

Another aspect of the present invention is directed to a CDMA user device comprising a personal digital assistant (PDA), a controller connected to the PDA, and a CDMA transceiver connected to the controller. A bandwidth allocation software implements a state machine comprising at least a state in which status of at least one layer of a communication session above a physical layer is maintained upon termination of the physical layer.